

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
23 December 2004 (23.12.2004)

PCT

(10) International Publication Number  
**WO 2004/110964 A2**

- (51) International Patent Classification<sup>7</sup>: **C07B 61/00**
- (21) International Application Number:  
PCT/DK2004/000416
- (22) International Filing Date: 15 June 2004 (15.06.2004)
- (25) Filing Language: English
- (26) Publication Language: English
- (30) Priority Data:  
PA 2003 00893 16 June 2003 (16.06.2003) DK  
60/478,343 16 June 2003 (16.06.2003) US
- (71) Applicant (for all designated States except US): **NUEVO-LUTION A/S** [DK/DK]; Rønnegade 8,5, DK-2100 Copenhagen (DK).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): **PEDERSEN, Henrik** [DK/DK]; Frodesvej 24, DK-2880 Bagsværd (DK). **FRANCH, Thomas** [DK/DK]; Humlebækgade 14, st.tv., DK-2200 Copenhagen N. (DK).
- (74) Agent: **HØIBERG A/S**; Store Kongensgade 59 A, DK-1264 Copenhagen K. (DK).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- Published:  
— without international search report and to be republished upon receipt of that report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



**WO 2004/110964 A2**

(54) Title: ENCODED MOLECULES BY TRANSLATION (EMT)

(57) Abstract: The present invention is directed to methods for the synthesis, selection, amplification and isolation of templated molecules having desirable properties. The invention makes it possible to synthesise a variety of different templated molecules other than  $\alpha$ -peptides and modified  $\alpha$ -peptides. In particular, the present invention enables synthesis of templated molecules such as  $\beta$ -,  $\gamma$ -,  $\omega$  peptides, carbopeptoids, vinylogous peptides, oligoanthrilamides, oligoureas, azapeptides (azatides), oligocarbamates, PNA, oligopyrrolinones, vinylogous sulfonamidopeptide, peptoids, azapeptoids and hydrazino peptides. It is possible in accordance with the methods of the invention to synthesise templated molecules comprising heterocyclic components, such as coumarins and quinolones, pyrazolone, isoxazolone, pyrimidiones, phthalhydrazides, diketopiperazines, hydantoins, and benzodiazepines.

BEST AVAILABLE COPY